

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-20 (cancelled).

21. (New) A method of measuring the amount of a coating on a paper web, the method comprising measuring the amount of at least one component of the coating on the paper web,

measuring the composition of the coating to be transferred to the paper web, and determining the amount of the coating on the paper web on the basis of the amount of at least one component of the coating on the paper web and the composition of the coating to be transferred to the paper web.

22. (New) A method as claimed in claim 21, comprising further adjusting the amount of the coating on the paper web on the basis of the measurement of the amount of the coating on the paper web.

23. (New) A method as claimed in claim 21, wherein the amount of at least one component of the coating on the paper web is measured by reflection measurement.

24. (New) A method as claimed in claim 23, wherein the amount of at least one component of the coating on the paper web is measured by reflection measurement based on infrared technique.

25. (New) A method as claimed in claim 21, wherein, the composition of the coating to be transferred to the paper web is determined by reflection measurement based on infrared technique.

26. (New) A method as claimed in claim 21, wherein the composition of the coating to be transferred to the paper web is determined by Raman spectroscopy based on molecular vibration spectroscopy.

27. (New) A method as claimed in claim 21, wherein the amount of at least one component of the coating on the paper web is measured continuously.

28. (New) A method as claimed in claim 21, wherein the amount of at least one component of the coating on the paper web is the amount of a pigment in the coating on the paper web.

29. (New) A method as claimed in claim 21, wherein the composition of the coating to be transferred to the paper web is determined continuously.

30. (New) An apparatus for measuring the amount of a coating on a paper web, the apparatus comprising

a first measuring device arranged to measure the amount of at least one component in the coating on the paper web by reflection measurement,

a second measuring device arranged to measure the composition of the coating to be transferred to the paper web, and

a data processing device arranged to determine the amount of the coating on the paper web on the basis of the amount of at least one component of the coating on the paper web and the composition of the coating to be transferred to the paper web.

31. (New) An apparatus as claimed in claim 30, the apparatus further comprising a control device arranged to adjust the amount of the coating on the paper web on the basis of the measurement of the amount of the coating on the paper web.

32. (New) An apparatus as claimed in claim 30, wherein the first measuring device is arranged to measure the amount of at least one component of the coating on the paper web by reflection measurement.

33. (New) An apparatus as claimed in claim 32, wherein the first measuring device is arranged to measure the amount of at least one component of the coating on the paper web by reflection measurement based on infrared technique.

34. (New) An apparatus as claimed in claim 30, wherein the second measuring device is arranged to determine the composition of the coating to be transferred to the paper web by reflection measurement based on infrared technique.

35. (New) An apparatus as claimed in claim 30, wherein the second measuring device is arranged to determine the composition of the coating to be transferred to the paper web by Raman spectroscopy based on molecular vibration spectroscopy.

36. (New) An apparatus as claimed in claim 30, wherein the first measuring device is arranged to measure the amount of at least one component of the coating on the paper web continuously.

37. (New) An apparatus as claimed in claim 30, wherein the amount of at least one component of the coating on the paper web is the amount of a pigment in the coating on the paper web.

38. (New) An apparatus as claimed in claim 30, wherein the second measuring device is arranged to determine the composition of the coating to be transferred to the paper web continuously.

39. (New) An apparatus as claimed in claim 30, wherein the second measuring device is arranged in a coating colour reservoir in a coating head, in a coating mixer, in a feed line between the mixer and the coating colour reservoir or in a separate sample line leaving the coating colour reservoir.

40. (New) An apparatus as claimed in claim 30, wherein the second measuring device is arranged in a coating colour reservoir in a coating head, in a coating storage or machine tank, in a transfer line between the storage and machine tanks, in a transfer line between the machine tank and the coating colour reservoir, in a separate sample line leaving the storage or machine tank or in a separate sample line leaving the coating colour reservoir.